

## Week 17 Algebra 1 Assignment:

Day 1: pp. 328-329 #1-20, 23-27

Day 2: pp. 331-332 #1-21 odd, 25-30

Day 3: p. 335 #2-24 even, 27-31

Day 4: pp. 341-342 #1-45 odd, 49-53

Day 5: pp. 343-344 #1-19 odd, 25-29

### Notes on Assignment:

#### Pages 328-229:

#### **Work to show:**

#1-6: Answers only

#7-15: Write the problem down without parentheses and show any work needed.

#16-17: Show the work needed.

#18-20: Show any work needed.

#23-27: Answers only.

#1-6: You do not need to write these problems down. Just add the columns of like terms.

#7-15: Look at the problem and then write it down horizontally without parentheses. Combine like terms. It is helpful to circle all like terms, combine them, then cross them out.

#16: Write let statements and then write an expression for the combined age. Simplify by combining like terms if possible.

#17: Write let statements and then write an expression for the perimeter. Simplify by combining like terms if possible.

#23-24: If you don't remember what these are, see section 1.3.

#### Pages 331-332:

#### **Work to show:**

#1-21: Write down the problem as you clear any ( ). Combine like terms.

#25-30: Answers only is ok.

#1-5: Remember that to subtract a quantity, we add its opposite. So write down the top polynomial and then underneath write the opposite of each term to change it to addition. Combine like terms.

#7-9: What you are subtracting *from* is listed first.

#11-21: Put a 1 in front of each set of parentheses. Then multiply through using Distributive to clear the parentheses. Combine like terms.

#25: The answer is not -43!

#26: You must get a common denominator.

#29-30: Give examples that show that commutative and associative properties don't work with subtraction.

### Page 335:

#### **Work to show:**

#2-4: Answers only

#6-24: Show any work needed.

#27-31: Answer as needed.

#2-4: When multiplying monomials, multiply the integers together, then multiply any variables together. Remember that when you multiply and the bases are the same, you add the exponents.

#6-10: Multiply each term in the top polynomial by the monomial term.

#13: The outside exponent on 3 must go on both the 3 and the  $a^3$ . Or, if you want, you can write what is in parentheses down 3 times and multiply in order to take care of that outer 3.

#17-23: Use the Distributive Property.

#27: How many apples do you have?

#28: If there is no written coefficient of a term, what is the coefficient?

#29: This is referring to a vertical line.

#30: What symbol do we use when there is no solution?

#31: When a variable has no written exponent, what is the exponent?

### Pages 341-342:

#### **Work to show:**

#1-45: Write the problem and show the 4 FOIL lines as you multiply. Simply.

#49-53: Answer as directed.

#1-45: All of these problems involve using FOIL. FOIL tells us which terms to multiply when we are finding the product of 2 binomials. The letters stand for:

F = First (the first terms of each binomial)  
O = Outside (the outside terms)  
I = Inside (the inside terms)  
L = Last (the last terms of each binomial)

After multiplying, look to see if you can combine like terms.

#31-35: To square a binomial means to multiply it times itself. Write it down twice and use FOIL.

#50-53: These properties are all from chapter 1.

### Pages 343-344:

#### **Work to show:**

#1-19: Write the problem and show the lines as you multiply. Simply.

#25-29: Show work as needed.

Notes for this section: The thing to remember when multiplying polynomials that are larger than binomials is that *every* term of the first polynomial must be multiplied times *every* term of the other polynomial.

Quick Check: The number of terms in your answer (before combining like terms) should be equal to the product of the number of terms in each polynomial. For example, when multiplying a binomial (2 terms) by a trinomial (3 terms) your answer (before combining like terms) should have  $2 \times 3 = 6$  term

#19: Multiply each set of binomials and leave each product in parentheses after you combine any like terms. The reason is that you need to subtract the entire polynomial that you get for the 2<sup>nd</sup> product. If you don't put parentheses around it, you will only be subtracting the first term, and you need to take that minus all the way through that polynomial.

#26: This problem can be done more than one way, but here is one suggestion. The exponent of -3 needs to go on each part of the product inside the parentheses. Put it on the 3, the  $x^{-2}$ , and the  $y$ . Simplify the  $(x^{-2})^{-3}$ . Use the rule that says when you raise an exponent to an exponent you multiply the exponents. Then take care of any negative exponents to finish the problem.

#27: Write these equations on top of each other as a system. You can use substitution or the addition method.

#29: When you have the absolute value of some “stuff” equal to 4, then the “stuff” equals 4 or the “stuff” equals -4.